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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/944,280 | 08/30/2001 | Shawn R. Gettemy | PALM-3675 | 1896 |

7590 03/26/2004

WAGNER, MURABITO & HAO LLP
Third Floor
Two North Market Street
San Jose, CA 95113

| EXAMINER |
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WU, XIAO MIN

| ART UNIT | PAPER NUMBER |
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2674

DATE MAILED: 03/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/944,280

Applicant(s)

GETTEMY ET AL.

Examiner

XIAO M. WU

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4,7,8,10,11,13-17,19,21-24 and 26-28 is/are rejected.
- 7) ☒ Claim(s) 5,6,9,12,18,20 and 25 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3-4, 7-8, 10-11, 13-17, 19, 21-22, 24, 26-28 are rejected under 35

U.S.C. 102(e) as being anticipated by Fishkin et al. (US Patent No. 6,243,074).

As to claims 1, 24, Fishkin discloses a portable computer (20, Fig. 1 or 122, Fig. 3) comprising: a bus (e.g. the dash lines connecting between elements 26, 24, 28, 32, 33 in Fig. 1); a processor (24) coupled to the bus; a housing (20) comprising an electronic muscle material (e.g. deformation sensor mesh 22), the electronic muscle material, when moved, causing the processor to behave in a prescribe manner (see Figs. 3 and 4); a display device (30) coupled to the bus and for providing a visual display; and wherein the processor (24) implements a user interface for controlling the display.

As to claims 3, 21, 27, Fishkin discloses that the movement of the electronic muscle causes the processor to sense handling by user for determination of left-handedness or right-handedness thereof (col. 3, lines 28-37).

As to claim 4, Fishkin discloses that in response to the determination of handed the electronic material generated a plurality of function buttons in proximity user's fingers (e.g. a plurality of sensors 26, 28 function as a plurality of buttons are surrounding to the display and

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can perform different functions such as moving object, scrolling the image etc. by touching the sensors or buttons).

As to claim 7, Fishkin discloses the electronic muscle material vibrate to apprise user of relevant message being display (col. 15, lines 20-26).

As to claims 8, 28, Fishkin discloses the electronic material can be resized and rescale (col. 9, lines 40-51).

As to claims 10, 17, Fishkin discloses that the electronic muscle including an internal speaker (col. 7, line 49).

As to claims 11, 19, Fishkin discloses sound detection by vibration which is equivalent to a microphone (see col. 15, lines 19-34)

As to claim 13, Fishkin discloses a portable electronic device comprising: a processor (24) coupled to a bus; a display module (30) for displaying information and coupled to the bus; a memory (26) for storing information and coupled to the bus; an electronic muscle material (22, 28) couple to the bus and for sue as an input device.

As to claim 14, Fishkin discloses the muscle material comprises a plurality of buttons (e.g. the sensor 22 and 28) for user input.

As to claim 15, Fishkin discloses the electronic muscle material generates information used by the processor for detecting the placement of user finger (e.g. depress, squeeze, fold pinch, etc.).

As to claims 16, 26, Fishkin discloses that the locations of the plurality of buttons (or sensors) are defined based on the displacement of the user fingers on the electronic muscle material. For example, the sensor or button can be placed on the edge of the display or on corner

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of the display, or on the back of the display for left hand fingers and right hand finger (see Figs. 3, Fig. 9, and Figs. 38, 39, respectively).

As to claim 22, Fishkin discloses that the electronic muscle generates information used by the processor for detecting the identity of a user (e.g. voice identification, see col. 15, lines 27-33 and Fig. 27).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 2 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fishkin et al. (US Patent No. 6,243,074) in view of Henty (US Patent No. 5,838,138).

As to claims 2 and 23, it is noted that Fishkin discloses the device including a rechargeable battery but fails to disclose the movement of the electronic muscle material cause charging of the battery. Henty is cited to teach a portable computer device which including a

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mechanical power converter for converting movement of the input device into electrical current to cause charging of the battery (see Fig. 1a, 1b). It would have been obvious to one of ordinary skill in the art to have included a mechanical power converter as taught by Henty into the electronic muscle device of Fishkin, so that the deformation movement of the electronic muscle can generate electrical current for charging the battery, so as to save power.

Allowable Subject Matter

6. Claims 5, 6, 9, 12, 18, 20 and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The US Patents 6,160,540, 6,411,283 are cited to teach a handheld display device.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xiao Wu whose telephone number is (703) 305-4721.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (703) 305-4709.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

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(703) 872-9306

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377

xw

March 21, 2004



**XIAO WU
PRIMARY EXAMINER
ART UNIT 2674**